# What Hunters Should Know About Avian Influenza



As of March 2006, Asian H5N1 avian influenza has not been found in North America—there are no records of positive tests in wild or domestic birds, and no known human cases of illness.

QUICK FACTS. Avian influenza is common in wild bird populations, but usually affects small numbers of birds and generally does not cause obvious clinical signs of infection. The virus is largely spread through nasal and oral discharges, and fecal droppings. Few bird viruses are able to infect humans, but influenza viruses are able to adapt and change over time. In 1997, a variety of H5N1 virus in Hong Kong was in rare cases able to spread directly from birds to humans.

Since 2003, a virulent strain of Asian H5N1 emerged and spread across Southeast Asia. This particular virus is a Highly Pathogenic Avian Influenza (HPAI) because it is highly contagious and deadly to domestic poultry. Although large numbers of poultry were destroyed to stop the virus, it spread in Asia and to Siberia and Kazakhstan during 2005. By early this year, the virus was documented in Europe and in Africa.

Most Asian H5N1 infections in humans resulted from close contact with infected poultry or poultry products. This virus does not move easily to humans, and there are no known cases of human infection from wild birds. As of March 1, 174 human cases of H5N1 and 94 deaths have been reported from seven countries.

# SURVEILLANCE FOR Asian H5N1 IN ALASKA BIRDS

Because Asian H5N1 has spread into northern Asia and eastern Europe, the US Fish and Wildlife Service (USFWS), US Geological Survey (USGS), Alaska Department of Fish & Game (ADF&G). and public health agencies have formed a partnership to conduct surveillance for the occurrence of this virus in wild birds in Alaska. This work complements ongoing research on avian influenza by the University of Alaska. During summer of 2005, several thousand waterfowl and shorebirds were tested for avian influenza in Alaska. In 2006, more intensive sampling will be conducted in Alaska and will be integrated with surveillance programs throughout the U.S. and Canada.

# TO REPORT DEAD BIRDS

If you find a group of sick or dead birds, contact wildlife authorities. Please leave birds where they are and call as soon as you can.

# **Anchorage**

ADF&G (907) 267-2257 U.S. Fish and Wildlife Service (907) 786-3309

# **Fairbanks**

ADF&G (907) 459-7206

#### Juneau

ADF&G (907) 465-4148

Elsewhere: Your local office of ADF&G, Parks or Refuges

### FOR HUMAN HEALTH QUESTIONS

Alaska Department of Health & Social Services, Section of Epidemiology

Anchorage (907) 269-8000

# Prospects of Asian H5N1 in North America

There are increasing reports that Asian H5N1 is infecting and killing wild birds in Asia, including some migratory species. These events and the spread of the this virus to new regions have created concerns that it could be carried to North America by migratory birds. To date, new outbreaks in poultry and deaths of wild birds have been linked to the movement of domestic birds and poultry products. There is little evidence that migratory birds have been a primary cause of the spread of Asian H5N1, and it is not clear what role they could play.

Some migratory birds, particularly waterfowl and shorebirds, move between Alaska and Asia. Some species breed in North America and cross the Bering Strait to molt during summer or to winter along the Asian coast. Other species breed in Russia and migrate to wintering grounds in North America. However, it is still not clear whether these migrants will acquire the H5N1 virus in Asia, how persistent this virus is in wild bird populations, or whether migratory birds can become long distance carriers. At present, the probability of Asian H5N1 infected birds getting to Alaska is unknown.

# Susceptibility of Other Animals to Avian Influenza

Although influenza strains are common in many groups of birds, information on infection and impacts to other animal groups is not complete. Recent literature demonstrates that Asian H5N1 can infect cats, domestic pigs, and a few other species of mammals. It is not documented in dogs.

# **Safe Preparation and Cooking of Game Animals**

There are no known cases where Asian H5N1 has been transmitted from wild birds to humans. However, even apparently healthy wild birds can be infected with other microorganisms and parasites that can move between wildlife and people. Therefore, it is always wise and safe to wear some basic protection, and keep tools and work surfaces clean when preparing game animals. Clean and sanitary handling of animals and meat reduces risk of serious infections.

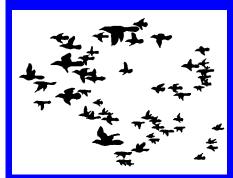
Viruses like Asian H5N1 are shed from birds in fecal material and other body fluids, so avoiding contact with these materials while plucking and cleaning birds is a good practice. Most viruses do not live very long after they have left their host and can be neutralized with heat, drying, and disinfectants, but they may persist in cold fresh water and even when frozen.

Practical hygiene for hunters includes: (1) Do not handle or butcher animals that are obviously sick or are found dead; (2) Do not eat, drink, or smoke while cleaning game; (3) Wear rubber gloves and washable clothing when cleaning game; (4) Wash your hands with soap and water or alcohol wipes immediately after handling game; (5) Wash tools and working surfaces with soap and hot water, then disinfect with a 10% solution of chlorine bleach; and (6) Cook game meat thoroughly—birds should reach an internal temperature of 155-165°F.

# How can I protect myself from Asian H5N1 and other diseases while hunting?

It is possible that Asian H5N1 and other diseases may be acquired from contact with infected birds. Hunters should take these precautions:

- Do not handle birds that are obviously sick or birds found dead.
- 2. Keep your game birds cool, clean, and dry.
- 3. Do not eat, drink, or smoke while cleaning your birds.
- 4. Use rubber gloves when cleaning game.
- 5. Wash your hands with soap and water or alcohol wipes after dressing birds.
- 6. Clean all tools and surfaces immediately afterward; use hot soapy water, then disinfect with a 10% chlorine bleach solution.
- 7. Cook game meat thoroughly (155-165°F) to kill disease organisms and parasites.





# **Frequently Asked Questions**

# Q: Why is there such concern about bird flu?

A: Public health and medical officials around the globe are concerned because influenza viruses are constantly changing form, and new strains of flu develop each year as viruses change genetically. Some influenza strains can jump from birds to mammals and to humans. Several global pandemics of other influenza viruses have occurred in the past, and the most worrisome scenario would occur if a new avian flu strain acquired the ability to spread from person to person, causing a widespread health crisis.

### Q: Can humans catch avian influenza from wild birds?

**A:** There are no known cases where avian influenza has been passed from wild birds to humans, but direct transmission from wild birds to humans cannot be excluded. Normally, avian flu viruses are passed between various species of wild birds, and some avian flu viruses are highly pathogenic to domestic poultry. The human cases of Asian H5N1 have occurred in people who have been heavily exposed to infected poultry and poultry products.

# Q: How could Asian H5N1 arrive in North America?

**A:** If it arrives in North America, Asian H5N1 is more likely to be transported through virus-contaminated articles or illegally imported birds or bird products. Migratory birds, particularly waterfowl and shorebirds, cross the Bering Sea between Alaska and Asia during their seasonal cycles of breeding, molting and wintering. While in Asia, migratory birds could contact infected domestic or wild birds. However, migratory birds have not been documented as the primary carriers of Asian H5N1 between regions.

#### Q: How concerned should bird hunters be about Asian H5N1?

A: Hunters should not be overly concerned about Asian H5N1 at present—it rarely infects humans, and there are no known cases of human infection by Asian H5N1 from wild birds. Also, it is not clear how persistent this virus is in wild bird populations or whether wild birds pose a long-distance, long-term means of spreading this disease. More research and surveillance over the coming year will allow better assessments of risks to birds and people in Alaska. Hunters should take common-sense precautions and use good hygiene while hunting, cleaning birds, and preparing game for the table.

# For More Information:

- For information on avian influenza in Asia: http://who.int/csr/disease/avian\_influenza/en/
- For human health information in Alaska: http://www.epi.alaska.gov/id/influenza/fluinfo.htm
- National Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/flu/avian/
- USGS National Wildlife Health Center: http://www.nwhc.usgs.gov/disease\_information/avian\_influenza/
- For updates on wildlife health in Alaska, ADF&G: http://wildlife.alaska.gov/index.cfm?adfg=disease.main
- For information about poultry and livestock, US Dept. of Agriculture: http://www.usda.gov/wps/portal/usdahome